

MARCH 4.

The President, Dr. LEIDY, in the chair.

Thirty-seven persons present.

A paper entitled "The Rufous or Thatching Ant of Dakota and Colorado," by Henry C. McCook, D. D., was presented for publication.

*Dictyophora* as *Apsilus vorax*.—Prof. LEIDY stated that Mr. Uselma C. Smith, last week, had afforded him the opportunity of examining a wheelless rotifer, attributed to *Apsilus*, which he had found abundantly, last autumn, in a pond at Fairmount Park, attached to *Anacharis*, and likewise in the Schuylkill River, near by, on *Potamogeton*. A number of specimens were observed attached to the sides of the jar, as well as to both the plants contained therein. The specimens being more readily detached from the latter than from the glass vessel, they were seen under more favorable circumstances than previously. They were recognized as *Dictyophora*, first described in 1857; and as a result of the last examinations, Prof. Leidy was led to the opinion that this, the *Apsilus lentiformis* Meczinchow, the *Cupelopagus bucinedax* Forbes, and the *Apsilus bipera*, recently communicated to the Academy by Miss Foulke, all pertain to the same species. In the recent specimens he had recognized the lateral antennæ ending in exceedingly delicate and motionless cils, as indicated by Meczinchow, and which previously, from the wrinkled condition of the specimens detached from hard objects, had escaped his attention. The structure described by Meczinchow as a ganglion, he could not satisfactorily distinguish as such; nor had he been able to detect the arrangement of the excretory canals, as represented by the same author. The lateral view of the animal accords with the figure of *Cupelopagus* as given by Forbes; the body being ovoid, with the mouth of the prehensile cup oblique, and appearing more or less unequally two-lipped. In this view the antennæ are undistinguishable. In all the forms described, the prehensile cup, in the same manner, is projected from and withdrawn within the mouth of a compressed oval or nearly spherical carapace, dotted with minute tubercles. The prehensile cup, substituting the usual rotary organs of rotifers, communicates with a capacious, variably sacculated and dilatible stomach, followed by the ordinary gizzard with its mastax, and then a second sacculated stomach. The ovoid cloacal pouch opens by an aperture, with radiated folds, externally, some distance in advance of the fundus of the carapace.

The size of the different specimens described varies greatly,

but nevertheless appears to gradate between the extremes. The specimens recently examined were the smallest observed; and in the closed condition measured 0.32 to 0.35 mm. long by 0.3 to 0.32 mm. broad. Former ones described were from 0.35 to 0.6 mm. long by 0.28 to 0.5 mm. broad. For *Cupelopagus*, Forbes gives 0.64 mm. long by 0.56 broad; and for *Apsilus lentiformis*, Meczinchow gives 0.8 mm. long by 0.7 mm. broad.

Miss FOULKE enquired whether Dr. Leidy had noticed the secondary sacculated stomach.

The President answered in the affirmative, and stated that the secondary stomach was present in all the forms.

Miss Foulke replied that none of the forms previously discovered had been either figured or described as possessing this organ; that Dr. Leidy's description coincided exactly with that of *Apsilus bipera*, as given by the speaker; and that, in any case, should this form, though differing in every particular save the structure of the mastax, prove to be identical with the *Dictyophora vorax* of 1857, still the differences between *Apsilus bipera*, the *Apsilus lentiformis* of Meczinchow and the *Cupelopagus* of Forbes—viz.: the difference in shape, the presence or absence of antennæ, of the secondary stomach, and of the ciliation of the cup—remain the same, and must separate the forms until proof of their identity can be given.

*A New Species of Trachelius.*—Prof. H. Carvill Lewis, on behalf of Miss S. G. FOULKE, made the following communication:

Having poured some Schuylkill water, freshly drawn from the spigot, into a tube, a white speck was noticed swimming freely about. On being placed in a live-box, and examined with a power of thirty-eight diameters, this speck proved to be a member of the family Trachelidæ, of Ehrenberg.

The family Trachelidæ includes three genera:—*Trachelius*, *Amphileptus*, and *Lorophyllum*.

The genus *Trachelius* consists of but one species, *Trachelius ovum* (Ehr.), from which the form found in the Schuylkill water differs considerably in shape.

*Trachelius ovum* was described by Ehrenberg as possessing a complex and profusely ramified œsophagus canal, and this opinion was endorsed by Lieberkuhn, also by Claparède and Lachmann; but W. Saville Kent disputed the point, and believes the appearance of the above structure to be given by the extreme vacuolation of the protoplasm, which would lend a branched intestine-like appearance to the intervening granular sarcode. The observations of the writer, in this respect, entirely coincide with those of Mr. Kent.

Ehrenberg also placed in the genus *Trachelius* two other species, viz., *T. tricophora* and *T. dendropholus*, but these forms, being true flagellates, have been relegated to the genus *Astasia*.